



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/368,635	08/04/1999	MARTIN F. ARLITT	10981718-1	5764

7590 04/22/2003

HEWLETT PACKARD COMPANY
INTELLECTUAL PROPERTY ADMINISTRATION
3404 E HARMONY ROAD
P O BOX 272400
FORT COLLINS, CO 80528-9599

EXAMINER

WOO, ISAAC M

ART UNIT	PAPER NUMBER
----------	--------------

2172

DATE MAILED: 04/22/2003

16

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/368,635

Applicant(s)

ARLITT ET AL.

Examiner

Isaac M Woo

Art Unit

2172

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 February 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

1. This action is in response to Applicant's amendment, filed on February 21, 2003 have been fully considered but are deemed moot in view of new ground of rejections below.

2. Claim 1 is amended and claims 1-7 are pending.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heddaya et al (U.S. Patent No. 6,205,481, hereinafter, "Heddaya").

With respect to claim 1, Heddaya discloses that in a data access network system (FIG. 1, col. 1, lines 5-56) that includes content server (16-1, 16-3, 16-4, 16-8 and 16-10, FIG. 1) coupled to a plurality of proxy servers (16-1, 16-3, 16-4, 16-8 and 16-10, FIG. 1, col. 5, lines 60-67 to col. 6, lines 1-46, col. 3, lines 30-67 to col. 4, lines 1-47,

Note: each cache server has also the roll of proxy server that receives updated content cache information) via an interconnect network (FIG. 1, col. 3, lines 30-67 to col. 4, lines 1-47), a system of maintaining content consistency (transparent distributing updated content) between the content server and proxy server (col. 3, lines 22-67 to col. 4, lines 1-48),

subscription manager in the content server (16-1, 16-3, 16-4, 16-8 and 16-10, FIG. 1) for specifying all of the proxy servers (16-1, 16-3, 16-4, 16-8 and 16-10, FIG. 1, col. 5, lines 60-67 to col. 6, lines 1-46) that are subscribed (distributing updated cache content, col. 3, lines 22-67 to col. 4, lines 1-48) to a content file stored in the content server, see (col. 12, lines 36-67 to col. 13, lines 1-58, FIG. 9, col. 14, lines 18-64), and

consistency manager also in the content server in the content server for to notifying all of so subscribed proxy servers that cache the content file when the content file is updated in the content server those proxy server(col. 13, lines 35-67 to col. 14, lines 1-30, col. 3, lines 34-67 to col. 4, lines 1-59, col. 3, lines 65-67 to col. 4, lines 1-21). Heddaya discloses the notifying updated information to proxy servers (col. 13, lines 35-67 to col. 14, lines 1-30, col. 3, lines 34-67 to col. 4, lines 1-59). Heddaya does not explicitly disclose discard the cache content file from those proxy servers. However, Heddaya discloses that the cache server learns about changes to cached documents by receiving information from a neighboring cache server. In particular, the cache servers send status to one another, to locate the neighborhood hierarchy. The list of modified documents is checked to remove any information which has most recently been received from the particular neighboring cache server. The cache server deletes

document identifiers from the list of modified documents once they have been sent to all neighboring cache servers, see (col. 4, lines 7-35), which teaches when the cache server receives updated content messages from neighboring cache server, it updates its own cache server content which means to discard old cache content. Therefore, it would have been obvious a person having ordinary skill in the art the time invention was made to include discard the cache content file from those proxy servers in the system of Heddaya to update cache contents with discarding old cache contents. Updating cache contents with discarding old cache contents is essential to make content consistency and integrity between content server and proxy server.

With respect to claim 2, Heddaya discloses that the subscription manager (117, FIG. 1) generates a subscription list that specifies all of the subscribed proxy servers (107, FIG. 1) that cache the content file when the subscription manager is notified by each of the proxy servers that it has cached the content file, see (col. 12, lines 36-67 to col. 13, lines 1-58, FIG. 9, col. 14, lines 18-64).

With respect to claim 3, Heddaya discloses that the proxy servers notify the subscription manager that it has cached the content file via an HTTP GET request with a SUB (subscription) header when the proxy server decides that the content file should be subscribed, see (col. 9, lines 7-67 to col. 10, lines 1-31).

With respect to claim 4, Heddaya discloses that if the proxy server decides that the content file is not a popular file, then that proxy server does not notify the subscription manager that it has cached the content file, see (col. 14, lines 41-64).

With respect to claim 5, Heddaya discloses that the consistency manager notifies each of subscribed proxy servers via a DWS INV message when a content file has changed, see (col. 13, lines 60-67 to col. 14, lines 1-30).

With respect to claim 6, Heddaya discloses that the consistency manager also sends the updated content file to each of the proxy servers via an HTTP PUT request with a DWS SUB header, see (col. 13, lines 60-67 to col. 14, lines 1-30).

With respect to claim 7, Heddaya discloses that the consistency manager notifies all of the proxy servers specified by the subscription manager to discard the cached contents file from the proxy servers when the content file is updated or deleted in the content server within a predetermined time interval, see (col. 13, lines 35-67 to col. 14, lines 1-30, col. 3, lines 34-67 to col. 4, lines 1-59).

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Reiner (U.S. Patent No. 6,219,676) discloses the system to establish and maintain cache coherency between a web server and one or more clients communicating through a network. The method includes designating monitor areas on a data segment of the server, determining if an activity occurs in one of the monitor areas, updating a change log if such activity occurs, and indicating the updated status of the change log to the clients. The method also handles requests from the clients and responding to those requests. Clients can then check the change log for updates, instead of resorting to dredging or web crawling.

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Isaac M Woo whose telephone number is (703) 305-0081. The examiner can normally be reached on 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Y Vu can be reached on (703) 305-4393. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-7239 for regular communications and (703) 746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

IMW
April 15, 2003


JEAN M. CORRIELUS
PRIMARY EXAMINER